

## 2016 Rural Mail Count

### I. PREFACE

#### A. Purpose and Content

USPS-FY16-40 aggregates data collected from the two most recent (March 2016 and February 2015) Rural Mail Counts (RMCs) for two purposes: 1) to determine the sizes of the cost pools by route type ('Evaluated' and 'Other'); and 2) to use the results from part 1) to calculate volume variability factors by route type. The relevant results of this aggregation are included in USPS-FY16-32 and USPS-FY16-NP14 (commonly called the "B" Workpapers) in workbook I-Forms, tab I-Factors.

#### B. Predecessor Documents

ACR 2015, USPS-FY15-40.

#### C. Corresponding Non-Public or Public Document

There is no corresponding Non-public document to USPS-FY16-40.

#### D. Methodology Changes

None

#### E. Input/Output

USPS-FY16-40 relies on no inputs from other ACR materials. Outputs are used by USPS-FY16-32 and USPS-FY16-NP14.

### II. ORGANIZATION

The relevant source code and RMC data are provided on the accompanying CD-ROM. The contents of the CD-ROM are described below.

The CD-ROM that accompanies USPS-FY16-40 includes the following files:

USPS-FY16-40.Preface.pdf	Preface
FY2015.February.RMCFlat.data	RMC Dataset
FY2016.March.RMCFlat.data	RMC Dataset
RMC2016AnalysisforCRA.sas	SAS program for analysis of RMC data

### III. RMC DOCUMENTATION

#### A. Overview

USPS-FY16-40 contains the data from the March 2016 and February 2015 RMCs and the SAS program, SAS log, and SAS output files from the March 2016 RMC. The SAS log and corresponding output file are included starting on page 3 of this preface.

The RMC data has the most recent route evaluations performed on each active rural route. The data includes the route type ('Evaluated' and 'Other'), counts for each evaluation item, and the time allowance given for each evaluation item. The output from the SAS program is used in two ways: 1) to determine the sizes of the cost pools by route type; and 2) to use the results from part 1) to calculate volume variability factors by route type. The two most recent evaluations were used for the FY2016 Cost and Revenue Analysis Report (CRA). The RMC conducted in February 2015 was used for quarters 1 and 2 of FY2016, whereas the RMC conducted in March 2016 was used for quarters 3 and 4 of FY2016.

#### B. Use of RMC in Cost Attribution

Rural carrier variability ratios are used to divide total rural carrier labor costs into variable and non-variable costs, as shown in USPS-FY16-32 and USPS-FY16-NP14, workbook CS10.xls, tab WS 10.0.1. Average weekly pieces are used to divide variable evaluation factors into cost pools for each rural evaluation category, such as the delivery of cased letters, FSS flats, and parcels. This analysis using the February 2015 RMC data is shown in workbook CS10.xls, tabs WS10.1.1 PQ1-2 and WS10.2.1 PQ 1-2. The corresponding analysis using the March 2016 RMC data is shown in workbook CS10.xls, tabs 10.2.1 PQ3-4 and WS 10.2.1 PQ 3-4.

#### C. RMC Data and Analysis

The RMC dataset contains the most recent evaluation for each rural route. The March 2016 dataset has 73,278 records, and the February 2015 dataset has 72,593 records. Each record represents an active rural route and it includes the type of route ('Evaluated' and 'Other'), totals by each evaluation factor, number of days the route was counted, and the time allotment by evaluation item. Those data elements are used to compute the average time by evaluation category per route. The averages are then aggregated by route type for each evaluation item. Each evaluation item is treated as either 'fixed' (e.g. boxes served) or 'variable' (e.g. DPS letters delivered). The volume variability factor for each route type is calculated by taking ratio of the sum of all variable evaluation factors to the total over the sum of fixed and variable evaluation factors by route type.

## D. SAS Log Listing

SAS log from the March 2016 RMC data file.

NOTE: SAS initialization used:

real time	2.32 seconds
cpu time	1.21 seconds

```

1   options nocenter;
2   options nodate;
3   options nonumber;
4
5
6   filename MAIL 'C:\#Local Data Not Backed Up\USPS-FY16-40\FY2016.March.RMCFI at. DATA';
7
8   *****READ IN UNIVERSE DATA;
9   DATA A; INFILE MAIL MESSOVER LRECL = 820;
10  Input
11    RTTYPE $ 1-5
12    MILES 6-10 .2
13    BOXESR 11-20
14    BOXESC 21-30
15    NDCBU 31-40
16    PARLOCK 41-50
17    LETTERS 51-60
18    FLATS 61-70
19    PARCELS 71-80
20    BOXHOLD 81-90
21    REGCERT 91-100
22    CODCUST 101-110
23    CHGADDR 111-120
24    MARKUP 121-130
25    F3821 131-140
26    DPS 141-150
27    SECSEG 151-160
28    MONORDR 161-170
29    LETCOLL 171-180
30    PARCACC 181-190
31    REGACC 191-200
32    POSTDUE 201-210
33    LOADING 211-220
34    ALLOW 221-230
35    DSMOUNT 231-240
36    DSMFEET 241-250
37    PURCHST 251-260 .2
38    RETRCT 261-270 .2
39    POUCHST 271-280 .2
40    DLLETRT 281-290 .2
41    DLFLATT 291-300 .2
42    DLPAROT 301-310 .2
43    DLPARRT 311-320 .2
44    WI THDT 321-330 .2
45    STRAPT 331-340 .2
46    LOADNGT 341-350 .2
47    RETRCTT 351-360 .2
48    DISMNTT 361-370 .2
49    DISMNTDT 371-380 .2
50    BOXHLDT 381-390 .2

```

```

51  CODCSOT 391-400 . 2
52  DLREGOT 401-410 . 2
53  MARKUPT 411-420 . 2
54  ADDRESST 421-430 . 2
55  MNORDOT 431-440 . 2
56  COLLFT 441-450 . 2
57  PPACCOT 451-460 . 2
58  STAMPST 461-470 . 2
59  F3821T 471-480 . 2
60  ALLOWT 481-490 . 2
61  POSTDUT 491-500 . 2
62  PERSNLT 501-510 . 2
63  CODCSRT 511-520 . 2
64  DLREGRT 521-530 . 2
65  MNORDRT 531-540 . 2
66  PPACCRT 541-550 . 2
67  COLREGT 551-560 . 2
68  MI LEST 561-570 . 2
69  BOXESRT 571-580 . 2
70  BOXESCT 581-590 . 2
71  NDCBUT 591-600 . 2
72  PARLCKT 601-610 . 2
73  POUCHT 611-620 . 2
74  SECSEGT 621-630 . 2
75  DPST 631-640 . 2
76  GOVVEHT 641-650 . 2
77  REUNLDT 651-660 . 2
78  TOTHRS 661-670 . 2
79  TOTMIN 671-680 . 2
80  ACTLHRS 681-690 . 2
81  YEAR 691-695
82  SCANI TEM 696-705
83  CPU 706-715
84  CPUI TEM 716-725
85  DPSFLAT 726-735
86  PARS 736-745
87  SCANT 746-755 . 2
88  SCNI TEMT 756-765 . 2
89  CPUOFCT 766-775 . 2
90  CPURTET 776-785 . 2
91  CPUI TEMT 786-795 . 2
92  DPSFLATT 796-805 . 2
93  PARST 806-815 . 2
94  Cntlen 816
95  LSTATUS $ 818
96  GOVVEH $ 820 ;
97
98
99

```

NOTE: The infi le MAIL is:

File name=C:\#Local Data Not Backed Up\USPS-FY16-40\FY2016. March. RMCFI at. DATA,  
 RECFM=V, LRECL=820, File Size (bytes)=60234504,  
 Last Modified=14Jun2016: 11: 22: 16,  
 Create Time=14Jun2016: 11: 22: 10

NOTE: 73278 records were read from the infi le MAIL.

The minimum record length was 816.  
 The maximum record length was 820.

NOTE: The data set WORK.A has 73278 observations and 86 variables.

NOTE: DATA statement used (Total process time):

real time	8.90 seconds
cpu time	0.95 seconds

```

100  DATA A;
101  SET A;
102
103  IF RTTYPE = 'H' OR RTTYPE = 'J' OR RTTYPE = 'K' THEN TYPE = 'EVAL';
104  ELSE IF RTTYPE = 'A' OR RTTYPE = 'M' THEN TYPE = 'OTHR';
105  ELSE DELETE;
106
107

```

NOTE: There were 73278 observations read from the data set WORK.A.

NOTE: The data set WORK.A has 73275 observations and 87 variables.

NOTE: DATA statement used (Total process time):

real time	0.09 seconds
cpu time	0.09 seconds

```
108  PROC FREQ DATA = A; TABLES YEAR*TYPE;
```

NOTE: There were 73275 observations read from the data set WORK.A.

NOTE: PROCEDURE FREQ used (Total process time):

real time	0.09 seconds
cpu time	0.06 seconds

```

109  DATA A; SET A;
110
111  LETTERS = LETTERS / CNTLEN;
112  FLATS = FLATS / CNTLEN;
113  PARCELS = PARCELS / CNTLEN;
114  BOXHOLD = BOXHOLD / CNTLEN;
115  REGCERT = REGCERT / CNTLEN;
116  CODCUST = CODCUST / CNTLEN;
117  MARKUP = MARKUP / CNTLEN;
118  MONORDR = MONORDR / CNTLEN;
119  DPS = DPS / CNTLEN;
120  LETCOLL = LETCOLL / CNTLEN;
121  PARCACC = PARCACC / CNTLEN;
122  REGACC = REGACC / CNTLEN;
123  POSTDUE = POSTDUE / CNTLEN;
124  LOADING = LOADING / CNTLEN;
125  RETRCT = RETRCT / CNTLEN;
126  SECSEG = SECSEG / CNTLEN;
127  F3821 = F3821 / CNTLEN;
128  CHGADDR = CHGADDR / CNTLEN;
129  DSMOUNT = DSMOUNT / CNTLEN;
130  DSMFEET = DSMFEET / CNTLEN;
131  SCANI TEM = SCANI TEM / CNTLEN;
132  CPU = CPU / CNTLEN;
133  CPUITEM = CPUITEM / CNTLEN;
134  DPSFLAT = DPSFLAT / CNTLEN;
135  PARS = PARS / CNTLEN;
136
137  ****;

```

```
138 *** CALCULATE AVERAGE VALUES PER ROUTE      ***;  
139 ****
```

NOTE: There were 73275 observations read from the data set WORK. A.

NOTE: The data set WORK. A has 73275 observations and 87 variables.

NOTE: DATA statement used (Total process time):

real time	0.10 seconds
cpu time	0.06 seconds

```
140 DATA A; SET A;  
141   BOXESRL = 0;  
142   L=0;  
143   IF LSTATUS = 'L' THEN DO  
144     BOXESRL = BOXESR;  
145     BOXESR=0;  
146     L = 1;  
147   END;  
148   *;  
149   *SEASONAL ROUTES WILL HAVE VERY LOW MILEAGE PUT IN TO KEEP;  
150   *ROUTE ACTIVE, SO REMOVE ROUTES WITH LOW MILEAGE;  
151   *;  
152   IF LETTERS = 0 or MILES LE .5 then delete;  
153   OUTPUT;
```

NOTE: There were 73275 observations read from the data set WORK. A.

NOTE: The data set WORK. A has 73257 observations and 89 variables.

NOTE: DATA statement used (Total process time):

real time	0.07 seconds
cpu time	0.07 seconds

```
154 DATA A; SET A;  
155 *;  
156 *NEW STARTING OCT 30 2004 - ALL RURAL ROUTES TO GET 18 MIN;  
157 *FOR RELOAD/UNLOAD TIME. SEE MOU;  
158 *EVALUATION MAY NOT SHOW THIS, SO PUT IT IN;  
159 *THE 18 MIN IS THE SAME REGARDLESS OF VOLUME, SO PUT IN;  
160 *FIXED TIME;  
161 *;  
162 REUNLDT = 18;  
163 *;  
164 *ALSO, IN FY 2005 ADDED IN GOVERNMENT VEHICLE USAGE TIME  
165 *TO FIXED FACTORS;  
166 ****  
167 * NEW FOR FY 2009;  
168 * SCANT = 6 MIN PER WEEK;  
169 * SCANNER ITEMS = NON-SIGNATURE SCANT ITEMS, 18 SEC PER SCAN;  
170 * INCLUDES DEL CON, SCAN, DU SAT & BUN SCANT  
171 * CARRIER PICKUP = NUMBER OF REQUESTS (90 SEC PER REQUEST),  
172 * NUMBER OF ITEMS (9 SEC PER ITEM),  
173 * INCLUDES EM, PRIO, INTL  
174 * 3982 LABELS = PARS LABEL, 15 SEC  
175 ****  
176 * CALCULATE THE AVERAGE VALUE PER WEEK FOR EACH EVALUATION ITEM **;  
177 * TO PUT INTO SPREADSHEETS WS 10.1.1 AND 10.2.1 **;  
178 ****  
179 * FSS EVALUATION FACTOR (I.E. DPS FLATS) DIFFERENT FOR GOVVEH / NON GOVVEH - NEW FY 2011;  
180 * new for sept. 2012 RMC do same for DPS;
```

```

181
182 FSS1 = 0; FSS2 = 0;
183 DPS1 = 0; DPS2 = 0;
184 IF GOVVEH = 'G' THEN DO;
185   FSS1 = DPSFLAT; FSS2 = 0;
186   DPS1 = DPS; DPS2=0;
187 END;
188 ELSE DO;
189   FSS2 = DPSFLAT; FSS1 = 0;
190   DPS2 = DPS; DPS1 = 0;
191 END;
192

```

NOTE: There were 73257 observations read from the data set WORK. A.

NOTE: The data set WORK. A has 73257 observations and 93 variables.

NOTE: DATA statement used (Total process time):

real time	0.07 seconds
cpu time	0.07 seconds

```

193 DATA A; SET A;
194 IF LSTATUS = 'L' THEN HD = 1; ELSE HD = 0;
195

```

NOTE: There were 73257 observations read from the data set WORK. A.

NOTE: The data set WORK. A has 73257 observations and 94 variables.

NOTE: DATA statement used (Total process time):

real time	0.07 seconds
cpu time	0.07 seconds

```

196 PROC SORT DATA = A; BY TYPE;
197 TITLE1 'THE MEANS OF THE VARIABLES ON THE ROUTES:' ;

```

NOTE: There were 73257 observations read from the data set WORK. A.

NOTE: The data set WORK. A has 73257 observations and 94 variables.

NOTE: PROCEDURE SORT used (Total process time):

real time	0.09 seconds
cpu time	0.09 seconds

```

198 PROC MEANS DATA=A MEAN STD;
199 BY TYPE;
200 VAR MILES BOXESR BOXESCT BOXESRL NDCBUT PARLOCK POUCHT WITHTDT
201 LETTERS FLATS PARCELS BOXHOLD CODCUST REGCERT MARKUP CHGADDR
202 F3821 LOADING PERSNLT MONORDR LETCOLL PARCACC REGACC POSTDUE
203 STAMPST RETRCT ALLOWT DSMOUNT DSMFEET DPS1 DPS2 SECSEG REUNLDT GOVVEHT
204 SCANT SCANITEM CPU CPUITEM FSS1 FSS2 PARS ;
205

```

NOTE: There were 73257 observations read from the data set WORK. A.

NOTE: PROCEDURE MEANS used (Total process time):

real time	0.46 seconds
cpu time	0.45 seconds

```

206 DATA A; SET A;
207 ****
208 *OTHER CHANGES FY 2009:

```

```

209 *1. FORMS 3579 NO LONGER USED;
210 *2. REPLACE WITH FORM 3821 CLEARANCE ITEMS - TREAT AS FIXED      ;
210! ;
211 *3. APR 2009 - NO REQUIREMENT FOR LOADING TIME TO BE <= 90;
212 *4. NO LONGER APPLICABLE - STAMPS TIME IS 20 MINUTES FOR          ;
213 *   ROUTE REGARDLESS OF L STATUS (4/23/09
214 ****
215 STAMPTF = STAMPST; STAMPTV = 0;
216 LOADTF = LOADNGT *.5;
217 LOADTV = LOADNGT *.5;
218 F3821TF = F3821T;
219
220 IF PPACCRT = 0 THEN PPACCRT = PPACCT;
221
222 FIXED = MILEST + BOXESRT + BOXESCT + NDCBUT + PARLCKT + POUCHT
223     + WTHDT + ADDRESS + F3821TF + LOADTF + PERSNLT + STAMPTF
224     + ALLOWT + DISMNTT + DISMNTDT + GOVVEHT + REUNLDT + PARST + SCANT;
225 VARIABLE =
226     DLLETRT + DLFLATT + DLPAROT + DLPARRT
227     + BOXHLDT + CODCSOT + CODCSRT
228     + DLREGOT + DLREGRT + MARKUPT + STRAPT + LOADTV
229     + MNORDOT + MNORDRT + COLLFT + PPACCT + PPACCRT + COLREGT
230     + POSTDUT + STAMPTV + RETRCTT + DPST + SECSEGT + CPUOFCT + CPURTET +
231     + CPUITEMT + DPSFLATT + SCNITEMT ;
232
233 TOTAL = FIXED + VARIABLE;
234 RATIO = VARIABLE/TOTAL;

```

NOTE: There were 73257 observations read from the data set WORK.A.

NOTE: The data set WORK.A has 73257 observations and 103 variables.

NOTE: DATA statement used (Total process time):

real time	0.07 seconds
cpu time	0.07 seconds

```
235 PROC SORT DATA=A; BY TYPE;
```

NOTE: There were 73257 observations read from the data set WORK.A.

NOTE: The data set WORK.A has 73257 observations and 103 variables.

NOTE: PROCEDURE SORT used (Total process time):

real time	0.17 seconds
cpu time	0.10 seconds

```
236 PROC MEANS DATA=A NOPRINT;
```

```
237 BY TYPE;
```

```
238 VAR VARIABLE TOTAL;
```

```
239 OUTPUT OUT=VAR MEAN=;
```

NOTE: There were 73257 observations read from the data set WORK.A.

NOTE: The data set WORK.VAR has 2 observations and 5 variables.

NOTE: PROCEDURE MEANS used (Total process time):

real time	0.04 seconds
cpu time	0.04 seconds

```
240 DATA VAR; SET VAR;
```

```
241 VARRAT = VARIABLE/TOTAL;
```

NOTE: There were 2 observations read from the data set WORK.VAR.

NOTE: The data set WORK.VAR has 2 observations and 6 variables.

NOTE: DATA statement used (Total process time):

real time	0.01 seconds
cpu time	0.01 seconds

```
242 PROC PRINT DATA=VAR;  
243 TITLE1 'RATIO OF VARIABLE TO TOTAL FOR EVAL/OTHER' ;  
244 RUN;
```

NOTE: There were 2 observations read from the data set WORK.VAR.

NOTE: PROCEDURE PRINT used (Total process time):

real time	0.00 seconds
cpu time	0.00 seconds

## E. SAS Program Output

SAS output from the March 2016 RMC data file.

The SAS System

The FREQ Procedure

Table of YEAR by TYPE

YEAR	TYPE	Frequency	Percent	Row Pct	Col Pct	EVAL	OTHR	Total
2012		11745	1	11746		16.03	0.00	16.03
						99.99	0.01	
						17.46	0.02	
2013		6275	2	6277		8.56	0.00	8.57
						99.97	0.03	
						9.33	0.03	
2014		6754	0	6754		9.22	0.00	9.22
						100.00	0.00	
						10.04	0.00	
2015		14658	11	14669		20.00	0.02	20.02
						99.93	0.07	
						21.79	0.18	
2016		27841	5988	33829		38.00	8.17	46.17
						82.30	17.70	
						41.39	99.77	
Total		67273	6002	73275		91.81	8.19	100.00

THE MEANS OF THE VARIABLES ON THE ROUTES:

TYPE=EVAL

The MEANS Procedure

Variabl e	Mean	Std Dev
<i>ffffffffff</i>		
MILES	50. 0960844	30. 0506971
BOXESR	194. 2828049	243. 7172991
BOXESCT	132. 0962999	227. 3289492
BOXESRL	281. 5985372	287. 2486255
NDCBUT	8. 1333155	15. 5863231
PARLOCK	12. 8699847	25. 9072551
POUCHT	0. 8830219	6. 5163040
WITHD T	26. 6079472	9. 5003633
LETTERS	1400. 71	1022. 78
FLATS	2542. 65	968. 9370768
PARCELS	341. 6131675	152. 1674759
BOXHOLD	571. 8752199	515. 9548811
CODCUST	0. 0655849	0. 3132466
REGCERT	20. 3453944	14. 2256192
MARKUP	68. 7657861	35. 5059493
CHGADDR	0. 9918709	2. 3242982
f3821	3. 9516543	2. 3455363
LOADING	61. 7939070	25. 4840551
PERSNL T	30. 0000000	0
MONORDR	0. 0480335	0. 5074801
LETCOLL	596. 3773556	430. 7127760
PARCAC C	0. 7783625	3. 8586165
REGACC	0. 3381102	3. 0540888
POSTDUE	1. 4911450	2. 3905493
STAMPST	20. 0000000	0
RETRCT	0. 0710307	3. 4597651
ALLOWT	40. 2072060	30. 4760457
DSMOUNT	52. 3613651	123. 9615248
DSMFEET	4891. 37	9583. 65
DPS1	6145. 10	5652. 14
DPS2	2768. 42	3632. 36
SECSEG	68. 3214457	420. 4590462
REUNLDT	18. 0000000	0
GOVVEHT	18. 6889823	16. 4418765
SCANT	6. 0000000	0
SCANITEM	405. 3697890	207. 2082840
CPU	4. 0601714	5. 4841242
CPUITEM	19. 7364710	73. 7666420
FSS1	196. 5355216	647. 0075591
FSS2	1. 1101448	38. 6615525
PARS	3. 2857161	3. 4290483
<i>ffffffffff</i>		

THE MEANS OF THE VARIABLES ON THE ROUTES:

TYPE=OTHR

The MEANS Procedure

Variabl e	Mean	Std Dev
<i>ffffffffff</i>		
MILES	30.7220725	19.7519095
BOXESR	120.5552772	123.7102027
BOXESCT	74.1457916	133.7621557
BOXESRL	88.8552104	139.0162996
NDCBUT	4.5704743	9.2189308
PARLOCK	7.0532732	15.4573720
POUCHT	2.3747495	13.7324592
WITHD T	23.8577154	12.1064179
LETTERS	632.0693609	749.2830040
FLATS	962.4131597	541.2732239
PARCELS	163.3717157	92.0710197
BOXHOLD	218.7251447	253.1494501
CODCUST	0.0189546	0.2167044
REGCERT	8.8132933	8.4403351
MARKUP	43.7819250	25.6769346
CHGADDR	0.4293309	1.0937115
f3821	2.3615008	2.1651564
LOADING	36.0394122	16.1952630
PERSNL T	30.0000000	0
MONORDR	0.0415553	0.3878666
LETCOLL	253.4384046	258.2838911
PARCAC C	0.4793198	3.4878387
REGACC	0.1354654	1.4643838
POSTDUE	0.6509964	1.3829704
STAMPST	20.0000000	0
RETRCT	0.0217379	0.5119579
ALLOWT	32.0919906	71.6423066
DSMOUNT	28.6155923	46.2784273
DSMFEET	3137.63	6427.44
DPS1	1594.43	2450.40
DPS2	1319.61	2075.87
SECSEG	506.9468103	841.2134171
REUNLDT	18.0000000	0
GOVVEHT	13.2655344	15.5574809
SCANT	6.0000000	0
SCANITEM	196.7264807	123.4716349
CPU	2.2005400	5.4408613
CPUITEM	11.0880650	61.2797840
FSS1	32.0831107	185.3621535
FSS2	3.3265698	46.8026058
PARS	1.6866232	3.5688505
<i>ffffffffff</i>		

## RATIO OF VARIABLE TO TOTAL FOR EVAL/OTHER

Obs	TYPE	_TYPE_	_FREQ_	VARIABLE	TOTAL	VARRAT
1	EVAL	0	67269	1123.31	3019.69	0.37200
2	OTHR	0	5988	500.95	1551.20	0.32295